(b) treating said miniature plants with a mutation-inducing agent to produce a mutant miniature plant population; and

Cont.

(c) selecting a mutant miniature plant having the desired trait from said mutant miniature plant population.

- 14. (Twice Amended) A mutant miniature tomato plant population wherein each miniature tomato plant of said miniature tomato plant population carries in a genome of its cells a different mutation, wherein said mutation is induced by an agent selected from the group consisting of a chemical mutagen and irradiation.
- 37. (Twice Amended) A method of producing a commercial plant with a desired trait, the method comprising:
  - (a) providing a population of miniature plants having the following characteristics: (i) reduced size in comparison to a commercial plant of the same species; (ii) mature to produce viable seeds or tubers at a plant density of at least ten-fold higher than standard growth conditions used for a commercial plant of the same species; and (iii) can be crossed with a commercial plant of the same species;
  - (b) treating said miniature plants with a mutation-inducing agent to produce a mutant miniature plant population;
  - (c) selecting a mutant miniature plant having the desired trait from said mutant miniature plant population;
  - (d) crossing said mutant miniature plant selected in step (c) with a commercial plant of the same species; and
  - (e) selecting progeny which phenotypically resemble the commercial parent plant and express the desired trait, thereby producing a commercial plant with the desired trait.

03